

## Features

# Genome jousting enlivens a sporting lull

Mediawatch: Journalists have closely followed the progress in sequencing the human genome so the announcement last month of publication of the first draft led to headline stories worldwide.

**Richard Harris** looks at American coverage and **Bernard Dixon** reviews some of the UK media's view of events

Football season in the US ended with the Super Bowl, and baseball season doesn't start until April. But readers yearning for lusty competition were not disappointed in mid-February. Please welcome genomics as the latest blood sport.

The sparring began well before the Celera Stalkers and the Public Puritans had their big match — a news conference on 12 February in Washington DC. The whole week before, team members were trading barbs (on an embargoed basis, of course). Deciphering the human genome is a noble and lofty enterprise. But there's nothing quite like a fight to liven up the newspaper.

Eric Lander, from the Whitehead Institute, headed the offense for the

Public. He told the *Washington Post*, for one, that Celera's whole-genome shotgun sequencing was a failure, to be reserved for special circumstances.

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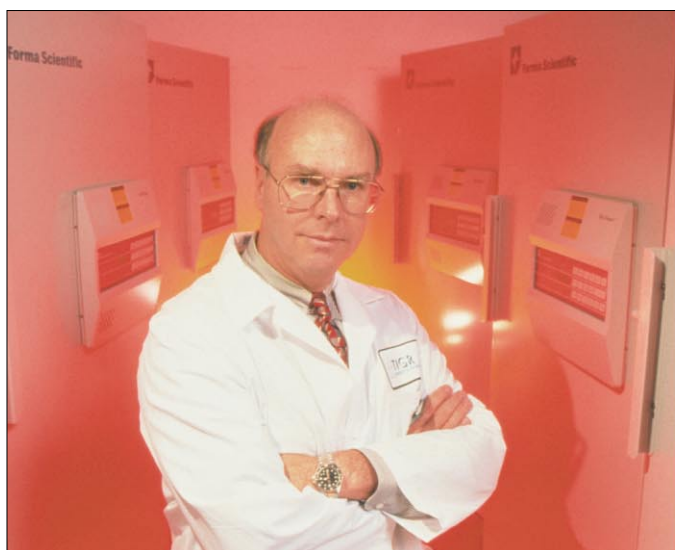
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"Maybe we don't care about a perfect sequence of, say, the platypus," Lander told the *Post*. "We've got the human right. I think the mouse we want to get right. But the wombat, the platypus, maybe pigs or something — there may be a lot of value in doing things like this."

Venter's reply? Too bad his rivals had, "got their panties in a gather" once again over the issue of whose technique is better. "Eric Lander is obviously bothered by Celera's success. He's playing with half-truths and innuendos. I'm getting so I really don't care what his opinion is."

The *Los Angeles Times* wrote an early Valentine to the Public, by quoting a stream of partisans allied against Venter. "He represented his idea as a revolutionary approach and that the public effort was too dumb to recognize that it works... But the whole-genome approach failed," Philip Green from the University of Washington told the *Times*. "What they did was give up," added Green's colleague Maynard Olson. Celera had a limited rebuttal in that story. But in other news accounts, Celera countered that the Public's effort is inferior because it currently has many bits of the sequence out of order and not oriented properly.



**Celera Stalkers v Public Puritans:** Craig Venter (left) of the Celera Genomics Group

(Hank Morgan, Science Photo Library) and John Sulston, formerly head of the Sanger

Centre in Cambridge (Wellcome Trust), are two of the key players.

One difficulty with a sport like this is the average reader (and even the above-average reporter) finds the all-important details even more baffling than baseball's infield fly rule.

The *Wall Street Journal* took a sensible approach to sorting all this out: It looked at what the marketplace is doing. Institutions are plunking down \$10,000 or more to gain access to Celera's database. Presumably they're not all simply trying to keep up with the Joneses. "For more than a year, J. Craig Venter has boasted that his upstart company, Celera Genomics Group, would produce a better, more user-friendly map of the human than legions of taxpayer-funded academics who had almost a decade-long head start. It turns out for all his braggadocio, Dr. Venter was right."

The *Journal* quotes several scientists, largely from the world of business, singing the praises of the Celera database. Among the converted: Douglas Williams, chief technology officer of Immunex, a biotechnology company in Seattle. He said Celera is ahead of Genbank, the repository for the public effort. "How much? I don't know," he told the *Journal*. "From where I stand, even if it's only one or two days, it's important. This is all about getting there first."

The *Wall Street Journal's* editorial page openly sneered at the public effort. "For years, advocates of public funding for basic research and technology have argued that only the government possesses the resources, and even the moral disinterestedness, to take on these long-term projects, pointing to the Internet or satellite technology as evidence. But with the success of Dr. Venter's enterprise, this argument has at last been exposed as a fallacy. It's time governments — and taxpayers — take notice of this new reality."

But reality, according to the Wellcome Trust, is actually quite different. "The greater part of the data for Celera's assemblies (DNA

sequences) comes from the Human Genome Project," the trust said in a statement quoted in *The Independent* (London). "Despite the benefit, Celera's assembly is only comparable with that of the HGP and is dependent upon it. Far from 'winning the race', as they have claimed, and many commentators have believed, their methodology has been found wanting."

The big face-to-face showdown on 12 February was, by comparison, a letdown. Venter and Lander sat at the same rostrum but denied the banks of television cameras any

overt conflict. The Public Puritans were satisfied to repeat the mantra, 'our data are free to all,' while the Celera Stalkers mentioned offhand — oh, we've just about finished the mouse. Both these digs scored points with the cognoscenti. But if genomics is ever going to make it on ABC's *Wide World of Sports*, it'll have to do better than that.

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